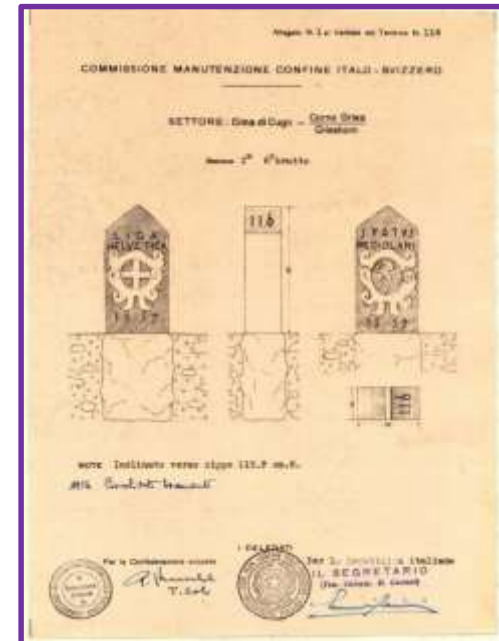




ISTITUTO GEOGRAFICO MILITARE ITALIANO



Plenary meeting of State Boundaries of Europe

Maria Vittoria De Vita – Federica Cauli

Brussels, 8th-9th november 2018





SBE – State Boundaries of Europe



Boundary	Km	Boundary marks	Boundary points	Delivery date
Italy-Slovenia	223	3.427	5.330	june 2012
Italy-Austria	430	2.645	32.796	august 2012
Italy-Switzerland	745	1.274	21.269	december 2015
Italy-France	515	697	24.810	february 2013

TOTAL: 1.913 Km - 8.043 Boundary marks



ITALY - FRANCE



Data delivered to SBE in February 2013

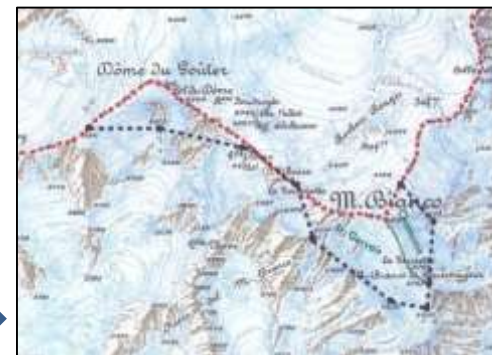
(Boundary marks politically agreed in 2012, boundary line politically not agreed)

- Boundary marks and line politically agreed in **2016**

SYSTEM: ETRS89

FRAME: ETRF89

(*BUT* territorial dispute in Monte Bianco area, from Col Infranchissable to triple boundary with Switzerland)



- Conversion of paper documents to digital format: ENDED in 2018



FUTURE PLANS:

- ✓ New delivery to SBE
- ✓ ~~New coordinates in ETRF2000~~
- ✓ Maintenance of boundary marks



ITALY - SWITZERLAND



Data delivered to SBE in December 2015

(Boundary marks politically agreed in 2012, boundary line politically not agreed)

- Boundary marks politically agreed in **2012**

SYSTEM: ETRS89

FRAME: ETRF89

- Boundary line: Sector III: politically agreed in Lugano 2012
Sector AA and I: politically agreed in Bellinzona 2018
Sector II: field measurements in progress until 2019 (Swiss part)
- Moving boundaries on watershed since **2009**



FUTURE PLANS:

- ✓ *Maintenance of boundary marks
(all boundary marks will be
checked during next 15 years)*





ITALY - AUSTRIA



Data delivered to SBE in August 2012

(Boundary marks & line politically agreed in 2005)

- Boundary marks and line politically agreed in **2005** (*data from 1982*)
- «**Common System**» converted for SBE to *SYSTEM: ETRS89*

FRAME: ETRF89

- **Moving boundaries on watershed since 2005**

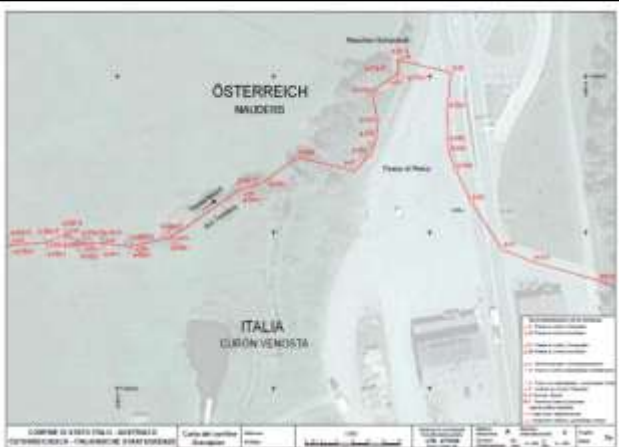
*Photogrammetric
surveys*



*Field surveys
on glaciers*



Line updated on new boundary map (color orthophotos)



FUTURE PLANS:

- ✓ *New official documentation
in ETRF2000 (2019)*
- ✓ *Maintenance of boundary marks*



ITALY - SLOVENIA



Data delivered to SBE in June 2012

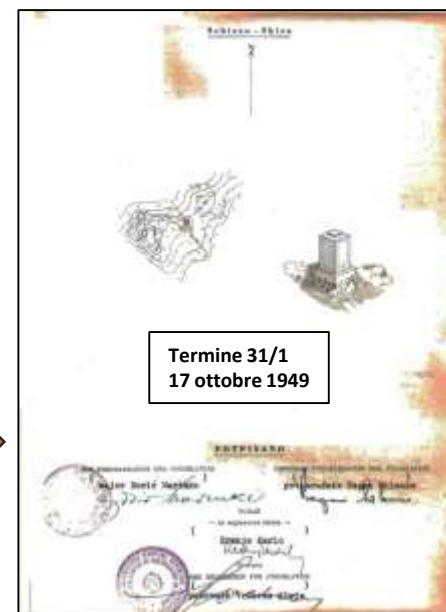
(Boundary marks & line politically agreed in 2010)

- Boundary marks and line politically agreed in **2016**

SYSTEM: ETRS89

FRAME: ETRF89

- Update of official documentation (boundary maps and list of coordinates)
- Scanning of paper documents: ENDED in 2017 →
- At present: both italian and slovenian heights of boundary marks are referred to Trieste tide gauge.
In the future: each country will refer heights to their official tide gauge (Genova for Italy; Koper for Slovenia)



FUTURE PLANS:

- ✓ *New delivery to SBE*
- ✓ *Maintenance of boundary marks*





MOVING BOUNDARIES

Italian Boundaries: 1913 km long



1200 km along Alps

- Average height: about 1300 m
- Peaks over 3.000 m: about 600
- Peaks over 4.000 m: about 80 (Italy, France, Switzerland)





MOVING BOUNDARIES

Boundary on watershed →

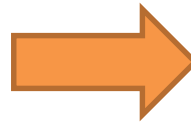
→ watershed on glaciers →

→ glaciers melt →

→ watershed / boundary
moves !



Vallelunga/
Karlesspitze
(Italy/Austria)





MOVING BOUNDARIES

Laws on moving boundaries:

- Since 2005: Italy-Austria
- Since 2009: Italy-Switzerland

«....Where the boundary [...] is defined by the watershed line, the boundary follows the gradual natural changes(*) of the line.»

NOT for sudden changes (e.g. landslides)
NOT for artificial changes
NOT on other natural features (e.g. rivers)

(*) Gradual natural changes: erosion or glacier movements



Giogo Alto / Hochjoch (Italy/Austria)





MOVING BOUNDARIES





MOVING BOUNDARIES... and any other business



Shack from 1° world war
built in 1917 on
Gran Zebrù / Königspitze
3.851 m
(Trentino Alto Adige)

*“Everyone therefore who hears these words of mine, and does them, I will liken him to a **wise man, who built his house on a rock.**”*

Parable of the Wise and the Foolish Builders, Gospel of Matthew

